Size: 15.400 acres

Mission: Support the Air Force mission in the Pacific by providing troops, equipment, and facilities

HRS Score: 50.00; placed on NPL in October 1992

IAG Status: Federal Facility Agreement signed in March 1993
Contaminants: VOCs, metals, asphalt, dioxins, PCBs, and UXO

Media Affected: Groundwater and soil

Funding to Date: \$56.0 million

Estimated Cost to Completion (Completion Year): \$37.4 million (FY2007)
Final Remedy in Place or Response Complete Date for All Sites: FY2006



Yigo, Guam

Restoration Background

In FY84 and FY85, Preliminary Assessments identified 50 sites at Andersen Air Force Base, including landfills, waste piles, fire training areas, hazardous waste storage areas, and spill sites. The 50 sites were consolidated into 39 sites and grouped into 6 operable units (OUs). Restoration activities began when low levels of trichloroethene (TCE) and tetrachloroethene (PCE) were detected in the sole-source drinking water aquifer on the island.

Increased ecological concerns have made restoration at the installation more complex. Rapid commercial development of nonmilitary lands on the island has made the base a de facto nature preserve. Various threatened and endangered species inhabit areas of the installation. The federal Endangered Species Act requires extensive ecological inventories before any field activities can be conducted within an identified habitat of endangered species.

Landfill 5 was capped in FY93. To avoid the high cost of importing sterilized soil to Guam, the installation used a synthetic cover material to cap the landfill. The installation's success with that innovative technology prompted other agencies on Guam to use the same synthetic material. Remedial Investigation and Feasibility Study (RI/FS) activities also began in FY93. Thirty-five monitoring wells were installed.

In FY96, 25 additional groundwater monitoring wells were installed to facilitate RI sampling and later long-term monitoring (LTM) of groundwater in the karst aquifer.

In FY97, the installation completed soil sampling and analysis, soil gas surveys, geophysical surveys, and site inventories for five sites. A gas chromatography/mass spectrometry laboratory was

used to analyze soil gas samples on site and accelerate fieldwork. The base was geographically reorganized into four OUs to accommodate excess-land issues and address groundwater at each site. The installation also performed site risk evaluations.

The installation formed a technical review committee (TRC) in FY93 and built a partnership with the Navy to establish a Defense Environmental Restoration Team. The TRC was converted to a Restoration Advisory Board (RAB) in 1995. The installation communicates with the neighboring villages of Yigo, Dededo, and Mangilao about potential contamination and restoration activities at the base.

FY98 Restoration Progress

The installation implemented Interim Remedial Actions (IRAs) and LTM of groundwater at 15 sites. An asphalt recovery project has recycled more than 3,000 drums of abandoned 1950s-vintage asphalt. This asphalt is being given to the local government for road repairs.

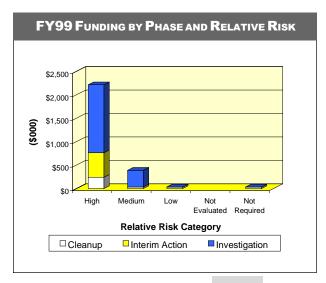
The base completed soil sampling and analysis, soil gas surveys, geophysical surveys, and site inventories for seven sites. A Record of Decision (ROD) was completed for six sites and associated groundwater, and Remedial Action is proceeding at the four sites that require cleanup. Peer reviews were done for these sites. Peer review waivers were received for presumptive remedial activities at five additional sites, and remedial activities are proceeding. Cleanup is in progress on excess lands.

A continuous partnership has been fostered with community and regulatory agencies by holding quarterly RAB and regulator meetings to receive input on base remedial activities. The

installation sponsored a tour of sites under remediation for the RAB. The community relations plan was also updated.

Plan of Action

- · Implement IRAs at four sites
- Continue cleanup of excess lands in FY99
- Complete Engineering Evaluations and Cost Analyses for six sites in FY99
- Foster continuous partnership with Guam EPA and EPA Region 9 remedial project managers in FY99
- · Continue LTM of groundwater in FY99
- Complete ROD for three sites in FY99



Air Force